

Amendment and Response

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Serial No.: 09/738,599

Confirmation No.: 1240

Filed: 15 December 2000

For: NUCLEIC ACID ENCODING AN AVIAN *E. COLI* ISS POLYPEPTIDE & METHODS OF USEAmendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the above-identified application:

1-29. (Canceled)

30. (Previously Presented) An isolated nucleic acid molecule comprising nucleotides 73 to 309 of the nucleotide sequence of SEQ ID NO:22.

31. (Previously Presented) The isolated nucleic acid molecule of claim 30 further comprising nucleotides 1 to 33 of the nucleotide sequence of SEQ ID NO:21, wherein the 33 nucleotides of the nucleotide sequence of SEQ ID NO:21 are located 5' of the nucleotides 73 to 309 of the nucleotide sequence of SEQ ID NO:22.

32. (Previously Presented) The isolated nucleic acid molecule of claim 30 wherein the nucleotides 73 to 309 of the nucleotide sequence of SEQ ID NO:22 are operably linked to a promoter functional in a host cell so as to form an expression vector.

33. (Previously Presented) An expression vector comprising an isolated nucleic acid molecule comprising nucleotides 73 to 309 of the nucleotide sequence of SEQ ID NO:22, operably linked to at least one regulatory sequence or control sequence.

34. - 36. (Canceled)

37. (Previously Presented) An immunogenic composition comprising:
an isolated nucleic acid molecule comprising a nucleotide sequence encoding a polypeptide comprising an avian *E. coli* Iss polypeptide or an immunogenic fragment or

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immunogenic subunit of the avian *E. coli* Iss polypeptide, wherein the nucleic acid molecule further comprises at least one regulatory sequence or control sequence operably linked to the nucleotide sequence encoding the polypeptide; and

a pharmaceutically acceptable carrier.

38. (Previously Presented) The immunogenic composition of claim 37 wherein the nucleic acid molecule is included in a vector.

39. (Original) The immunogenic composition of claim 38 wherein the vector is a plasmid.

40. (Original) The immunogenic composition of claim 38 wherein the vector is a viral vector.

41. (Previously Presented) The immunogenic composition of claim 37 wherein the at least one regulatory sequence or control sequence causes expression of the polypeptide in an animal cell.

42. (Previously Presented) The immunogenic composition of claim 38 wherein the nucleic acid molecule further comprises an immunostimulatory nucleotide sequence.

43. (Cancelled)

44. (Previously Presented) The immunogenic composition of claim 38 wherein the nucleic acid molecule comprises nucleotides 73 to 309 of the nucleotide sequence of SEQ ID NO:22.

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45. (Previously Presented) The immunogenic composition of claim 44 wherein the nucleic acid molecule further comprises nucleotides 1 to 33 of the nucleotide sequence of SEQ ID NO:21 located 5' of the nucleotides 73 to 309 of the nucleotide sequence of SEQ ID NO:22.

46. - 66. (Canceled)

67. (Previously Presented) The immunogenic composition of claim 44 wherein the immunogenic composition generates an antibody response against the polypeptide when administered to a subject.

68. (Previously Presented) An immunogenic composition comprising:
an isolated nucleic acid molecule comprising a nucleotide sequence encoding a polypeptide comprising an avian *E. coli* Iss polypeptide or an immunogenic fragment or immunogenic subunit of the avian *E. coli* Iss polypeptide, wherein the nucleic acid molecule is operably linked to a promoter and further comprises an immunostimulatory nucleotide sequence;
and
a pharmaceutically acceptable carrier.

69. (Previously Presented) An immunogenic composition comprising:
an isolated nucleic acid molecule comprising a nucleotide sequence comprising nucleotides 73 to 309 of the nucleotide sequence of SEQ ID NO:22 and a promoter operably linked to the nucleic acid molecule; and
a pharmaceutically acceptable carrier.

70. (Previously Presented) An immunogenic composition comprising:
an isolated nucleic acid molecule comprising a nucleotide sequence encoding a polypeptide comprising an avian *E. coli* Iss polypeptide or an immunogenic fragment or

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immunogenic subunit of the avian *E. coli* Iss polypeptide, wherein the nucleic acid molecule comprises nucleotides 73 to 309 of the nucleotide sequence of SEQ ID NO:22, nucleotides 1 to 33 of the nucleotide sequence of SEQ ID NO:21 located 5' of nucleotides 73 to 309 of the nucleotide sequence of SEQ ID NO:22, and a promoter operably linked to the nucleic acid molecule; and

a pharmaceutically acceptable carrier.

71. - 73. (Canceled)